Introduction:

Missouri is rich in water. With that, wealth comes a multitude of water recreation activities for Missouri citizens and visitors to take advantage. From multi-million gallon water parks with wave pools and slides, to scenic natural rivers and everything in between, there is a water recreation outlet for everyone who lives in or visits Missouri. Though innumerable hours of fun can be had on the various water recreation areas in Missouri, you should be aware that hazards also lurk in the water.
Recreational water sites can be classified into two general areas; natural areas such as streams, lakes and reservoirs and controlled areas such as public and semi public pools, spas and water parks. Each has their own safety concerns.

Authority:

Program authority is found in 315.005 - 315.065, RSMo and 19 CSR 20-3.050 Sanitation and Safety Standards for Lodging Establishments accessed at: www.dhss.mo.gov/Lodging/lodgingmanual.pdf. 19 CSR 20-3.020 Sanitation of Public Swimming Places accessed at: http://www.sos.mo.gov/adrules/csr/csr.asp

Program Staff:

Program Manager:

Steve Krysiak
149 Park Central Square Suite 116
P.O. Box 777 MPO
Springfield, MO 65801
417.895.6915
steve.krysiak@dhss.mo.gov

District Environmental Public Health Specialist Vs (technical questions):

A map of the counties and the appropriate contact can be found at:

OVERVIEW

Foreword

Public swimming pools and spa pools may be divided into two distinct types:
• where the water is treated physically and chemically, and then re-circulated, or
• where the water is untreated.
These guidelines consider both types of public pools.

A **treated water public swimming pool and spa pool** is one where the water is treated and re-circulated. Typical examples included public pools where the water is filtered, disinfected and re-circulated such as community swimming pools. Sections 6.1-6.6 provide the guidelines for these public swimming pools and spa pools.

An **untreated natural swimming pool and spa pool** is one where water enters the pool or spa directly from a natural source either under its own flow or by pumping and where no control is exerted over the outflow of the water from the pool. Typical examples include river swimming "holes", draw and spill pools, enhanced swimming holes where the pool may not be completely enclosed in a structure but where public bathing is intended. Section 6.7 provides the guidelines for these public swimming pools.

Purpose

The essential purpose of this guideline is to specify **minimum** levels of chemicals and disinfectants as health criteria for **treated** water public swimming pools and public spa pools. Although this document is not a manual, it will provide basic health and safety recommendations. For a more complete discussion of pool water chemistry go to http://www.dhss.mo.gov/RecreationalWater/PoolsSpas.htm and hyperlink to the SWIMMING POOL WATER CHEMISTRY guide.

The guidelines have equal application to all swimming pools and spa pools but were specifically drafted for application to the following pools:

- municipal swimming pools and spa pools,
- pools where the public, members and their guests, customers and patrons may have reasonable access as part of a service or workplace and includes:
    - hotels and motels
    - clubs
    - schools
    - gymnasiums & health resorts
    - recreational resorts
    - hospitals (hydrotherapy pools) and,
    - workplaces.

The guidelines were not specifically designed to apply to private residential premises such as single and dual occupancy premises. The disinfection levels may however, still be used for these premises as they are relevant.

The guidelines for **untreated** swimming pools are intended for use for natural swimming pools such as rivers, streams, water holes and applications of natural waters, such as draw and spill enhanced swimming situations.

Treated Water Public Swimming Pools And Public Spa Pools

All people who use public swimming pools and spa pools are susceptible to infection. Public pools are more likely to be contaminated with a greater diversity of disease causing organisms than domestic swimming pools because they are open to community contamination. Disease causing organisms may be introduced from many sources but are mainly associated with bathers. These organisms may be brought into a pool on the bathers skin, and in their saliva, urine and feces. The organisms may also be introduced from dust, birds droppings, make-up water and soil carried on bathers feet. Some of these disease-causing organisms live and may even grow in pool water unless the pool water is properly and continuously disinfected. Disease causing organisms must be quickly and effectively killed in the pool water in which they are introduced, otherwise a disease may be transmitted. The swimming pool or spa pool needs to be designed and operated to enhance the action of the disinfectant.

All treated water public swimming pools and public spa pools shall be equipped with an effective water circulation system, filter and continuous disinfectant dosing control system. Continuous dosing means the use of a metering device to feed a chemical at a relatively constant rate. Continuous dosing does not include the use of a floating dispenser containing a dissolving chemical.

The installation and use of automatic disinfectant dosing systems and pH correction systems using automatic controllers receiving feedback information from chemical sensing probes are strongly recommended.

These guidelines specify the **MINIMUM** chemical criteria by which a swimming pool and spa pool must be operated to minimize public bather risk to acceptable levels. It is important for people who are responsible for pool operation to maintain their pools at a standard equal to or greater than these guidelines at all times the pool is open to the public. Persons who are more susceptible to disease should be aware of their higher risk status and adopt suitable precautions.